

**IG-01-041**

**AUDIT  
REPORT**

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**PROCUREMENT WORKFORCE PLANNING**

**September 27, 2001**

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National Aeronautics and  
Space Administration

**OFFICE OF INSPECTOR  
GENERAL**

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## **Acronyms**

CCI	Consolidated Contracting Initiative
DOD	Department of Defense
DODIG	Department of Defense Inspector General
FAR	Federal Acquisition Regulation
FASA	Federal Acquisition Streamlining Act
FY	Fiscal Year
GAO	General Accounting Office
GPRA	Government Performance and Results Act
NCIP	NASA Contracting Intern Program
OFPP	Office of Federal Procurement Policy
OMB	Office of Management and Budget
OPM	Office of Personnel Management

W

September 27, 2001

TO: A/Administrator

FROM: W/Inspector General

SUBJECT: INFORMATION: Procurement Workforce Planning  
Report Number IG-01-041

The NASA Office of Inspector General has completed an audit of Procurement Workforce Planning. We found that NASA has taken several positive steps to plan for its future procurement workforce needs. However, the number of potential procurement retirees increased from about 40 percent (269 of 679 contract specialists) as of September 1997 to about 42 percent (278 of 669 contract specialists) as of October 2000. As a result, NASA does not have the assurance that it will have enough adequately trained procurement staff at NASA Centers to effectively handle procurement workload demands.

### **Background**

NASA is participating in several acquisition reform initiatives intended to streamline the procurement process and to minimize the overhead expenses associated with procurement actions. These initiatives include Simplified Acquisition methods, Multiple Award Contracts, and the Consolidated Contracting Initiative. Also, working with the Office of Federal Procurement Planning (OFPP) guidance, NASA has established specific criteria regarding the level of training its procurement workforce must complete.

### **Recommendations**

We recommended that the Associate Administrator for Procurement continue to pursue education, training, and development of staff to meet the required certification levels for existing staff. This action would ensure that the existing procurement workforce has the appropriate training and certification necessary to function at maximum efficiency. We also recommended that the Associate Administrator for Procurement evaluate the ongoing results of the NASA Contracting Intern Program (NCIP) to determine whether changes may be necessary to increase the retention rate of interns. By increasing the retention rate, NASA will achieve a greater return on the resources invested in training interns. We further recommended that the Associate Administrator for Procurement

continue to work with OFPP to develop procurement performance measures that may be used to evaluate staffing requirements. With the availability of these performance measures, NASA should be able to more accurately assess its procurement workforce needs and more effectively plan to meet those needs.

### **Management Response**

Management concurred with the recommendations. NASA currently has 85 percent of its targeted workforce certified at the correct certification levels and will work aggressively to encourage the remaining 15 percent to pursue the necessary steps to become certified. To improve the retention rate of the NCIP, this year (fall 2001), NASA plans to recruit and hire only college graduates as interns. NASA was the first agency to submit to OFPP and to receive approval for its NASA Career Acquisition Training Handbook. Management will continue to work with and provide data to OFPP on education and training of its acquisition workforce.

Details on the status of the recommendations are in the Recommendations section of the report.

**[original signed by]**

Roberta L. Gross

Enclosure

Final Report on Audit of Procurement Workforce Planning

# **PROCUREMENT WORKFORCE PLANNING**

W

September 27, 2001

TO: H/Associate Administrator for Procurement

FROM: W/Assistant Inspector General for Audits

SUBJECT: Final Report on Procurement Workforce Planning  
Assignment Number A-00-058-00  
Report Number IG-01-041

The subject final report is provided for your information and use. Please refer to the Executive Summary for the overall audit results. Our evaluation of your response has been incorporated into the body of the report. We consider management's corrective actions responsive for all recommendations, and the actions are sufficient to close the recommendations for reporting purposes.

If you have questions concerning the report, please contact Mr. Lorne A. Dear, Program Director, Procurement Audits, at (818) 354-5634; Mr. Tony A. Lawson, Program Manager, at (301) 286-6524; or Mr. Walter K. Curtis, Auditor-in-Charge, at (818) 354-9746. We appreciate the courtesies extended to the audit staff. The final report distribution is in Appendix D.

**[original signed by]**

Alan J. Lamoreaux

Enclosure

cc:

AI/Associate Deputy Administrator

AB/Associate Deputy Administrator for Institutions

B/Acting Chief Financial Officer

B/Comptroller

BF/Director, Financial Management Division

G/General Counsel

JM/Director, Management Assessment Division

JR/Director, Contractor Industrial Relations Office

HK/Chair, Headquarters Exchange Council

ARC/Director, Ames Research Center

DFRC/Director, Dryden Flight Research Center

GRC/Director, Glenn Research Center at Lewis Field

GSFC/Director, Goddard Space Flight Center

JSC/Acting Director, Lyndon B. Johnson Space Center

KSC/Director, John F. Kennedy Space Center

LaRC/Director, Langley Research Center

MSFC/Director, George C. Marshall Space Flight Center

SSC/Acting Director, Stennis Space Center

JPL/Manager, NASA Management Office, Jet Propulsion Laboratory

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# NASA Office of Inspector General

IG-01-041  
A-00-058-00

September 27, 2001

## Procurement Workforce Planning

### Executive Summary

**Background.** NASA is participating in several acquisition reform initiatives that are intended to streamline the procurement process and minimize the overhead expenses associated with procurement actions. Some of these initiatives include Simplified Acquisition methods, Multiple Award Contracts, Purchase Cards, and the Consolidated Contracting Initiative.

NASA has established specific criteria regarding the level of training its procurement workforce must complete. The OFPP also provides guidance on education, training, and career development for procurement personnel. Additionally, NASA has established several performance measures for procurement, including the following:

- **Government Performance and Results Act.** NASA provides performance measures in areas such as performance-based contracting and the use of small disadvantaged businesses. NASA does not provide any information under GPRA related to the number or experience of its procurement workforce.
- **OFPP Acquisition System Performance Measures Report.** Annually, NASA provides acquisition system information to the OFPP on education and training; cost, schedule, and performance; and purchase card usage. This information includes the number and percentage of procurement employees who have met the education and training requirements.

**Objectives.** The overall objective was to determine whether the NASA Office of Procurement was adequately planning for its procurement workforce needs. The specific objectives were to determine whether: (1) adequately trained procurement staff will exist at Centers based on procurement forecasts; (2) the contracting intern program has been effective in recruiting and retaining new staff; and, (3) appropriate investments in education, training, and development exist for procurement staff.

Appendix A contains further details on the audit objectives, scope, and methodology.

**Results of Audit.** NASA has taken several positive steps to plan for its future procurement workforce needs. Despite the efforts, however, NASA does not have assurance it will have enough adequately trained procurement staff at NASA Centers to effectively handle procurement workload demands. A NASA Office of Procurement study performed in 1997 showed that Agencywide attrition of procurement employees

through retirement could be as high as 40 percent (269 of 679 contract specialists) by the end of 2007. In response to the study, the Office of Procurement developed a leadership plan and established a contracting intern program. That office also increased its emphasis on education, training, and development of existing procurement staff. Our audit showed that the number of potential procurement retirees has increased from about 40 percent (269 of 679 contract specialists) as of September 1997 to about 42 percent (278 of 669 contract specialists) as of October 2000.

NASA has also initiated a number of acquisition reform initiatives that affect the number and types of contracts in an effort to streamline the acquisition process, including the involvement of procurement personnel. Further, the Agency is reporting several procurement performance measures for the Government Performance and Results Act (GPRA), and the OFPP is developing a "cost to spend" metric to evaluate procurement processing costs. The GPRA information the Agency is reporting, however, does not include performance measures to determine whether sufficient procurement personnel will be available to effectively handle the projected workloads.

**Recommendations.** The Associate Administrator for Procurement should: (1) continue to pursue education, training, and development of staff to meet required certification levels for existing staff; (2) evaluate the ongoing results of the NCIP to determine whether changes may be necessary to increase the retention rate of interns; and (3) continue to work with OFPP to develop procurement performance measures that may be used to evaluate staffing requirements.

**Management's Response.** Management concurred with all the recommendations and has implemented the recommended actions.

**Evaluation of Management's Response.** We consider management's implemented actions responsive to the recommendations. Our detailed response to management's comments is in the recommendations section of the report.

# NASA Office of Inspector General

IG-01-041  
A-00-058-00

September XX, 2001

## Procurement Workforce Planning

### *Introduction*

The NASA Office of Inspector General (OIG) has completed an audit of procurement workforce planning. We performed this audit because of increasing concerns about human capital, an issue confronting many Federal agencies as a significant portion of the workforce becomes eligible for retirement from Federal service. The General Accounting Office (GAO) has defined human capital as people whose value can be enhanced through investment.<sup>1</sup>

In 1997, the OFPP directed Federal agencies to take actions in the areas of accession,<sup>2</sup> education, training, and career development to ensure an adequate number of qualified personnel within their respective acquisition workforces.<sup>3</sup> The NASA OIG identified human capital as one of its top 10 management challenges for fiscal year (FY) 2001, stating that NASA faces the loss of significant procurement expertise through the year 2007. NASA must ensure proper levels of staffing to perform contracting requirements and properly monitor prime contracts and subcontracts. The Comptroller General also has testified on the issue of human capital.<sup>4</sup> Further, the GAO has reported to the Congress on workforce issues and recently added human capital to its list of top 10 management concerns that Federal agencies must face.<sup>5</sup>

In May 2000, the NASA Inspector General testified before the Congress on Federal employee incentives to attract and maintain a skilled workforce. Her testimony addressed some of the effects of NASA's failure to recruit, train, and retain the proper mix of a skilled workforce.<sup>6</sup> Her testimony also addressed the problems faced by the NASA OIG itself in recruiting certain skilled information technology (IT) professionals such as an IT criminal investigator in the Silicon Valley area of California because of the high cost of housing and the inability to offer a housing allowance similar to that offered by private industry. The Inspector General later testified before the Congress on the

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<sup>1</sup> On February 1, 2001, the Comptroller General (who heads the GAO) testified before the Congress on the issue of human capital, stating that "today's Federal human capital strategies are not appropriately constituted to meet the current and emerging needs of the Federal government and the nation's citizens."

<sup>2</sup> "Accession" is the acquisition of additional personnel.

<sup>3</sup> The OFPP Policy Letter No. 97-01, is dated September 12, 1997.

<sup>4</sup> See footnote 1.

<sup>5</sup> The GAO Letter B-285463 to the Chairman, Committee on Commerce, Science, and Transportation, United States Senate, is dated August 15, 2000.

<sup>6</sup> The Inspector General testified before the Senate Subcommittee on Oversight of Government Management, Restructuring and the District of Columbia on May 2, 2000.

lack of management resources contributing to unsuccessful missions<sup>7</sup> and, after years of focusing on downsizing efforts, NASA's need to develop a workforce strategy addressing recruitment, training, and retention of personnel.<sup>8</sup>

The overall audit objective was to determine whether NASA is adequately planning for its procurement workforce needs. Details on our audit objectives, scope, and methodology are in Appendix A.

## ***Background***

**Acquisition Reform Initiatives.** NASA is participating in several acquisition reform initiatives that are intended to streamline the procurement process and minimize the overhead expenses associated with procurement actions. Some of these initiatives include Simplified Acquisition methods, Multiple Award Contracts, Purchase Cards, and the Consolidated Contracting Initiative. (See Appendix B for details on these initiatives.)

**NASA Performance Measures.** NASA has established specific criteria<sup>9</sup> regarding the level of training its procurement workforce must complete.<sup>10</sup> The OFPP also provides guidance on education, training, and career development for procurement personnel. Additionally, NASA has established several performance measures for procurement, including the following:

- **Government Performance and Results Act.** NASA provides performance measures in areas such as performance-based contracting and the use of small disadvantaged businesses. NASA does not provide any information under GPRA related to the number or experience of its procurement workforce.
- **OFPP Acquisition System Performance Measures Report.** Annually, NASA provides acquisition system information<sup>11</sup> to the OFPP on education and training;

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<sup>7</sup> In this testimony, the Inspector General was citing findings of the Mars Climate Orbiter Mishap Investigation Board's Report on Project Management. This report, dated March 13, 2000, states that the lack of adequate staffing contributed, in part, to the mission failure.

<sup>8</sup> The Inspector General testified before the House Subcommittee on National Security, Veterans Affairs, and International Relations on March 15, 2001.

<sup>9</sup> The NASA Procurement Career Development Training Policy, dated March 14, 1998, prescribes procedures for a NASA career development program for procurement personnel consistent with the general policies and authorities stated in the OFPP Letter 97-01, "Policy Letter on Procurement System Education, Training and Experience Requirements for Acquisition Personnel," dated September 25, 1997.

<sup>10</sup> Section 4307 of the Clinger-Cohen Act (Public Law 104-106) requires, among other matters, that each executive agency establish policies and procedures for the effective management of the acquisition (that is, procurement) workforce of the agency. This section addresses the education, training, career development, and performance incentives that should be offered to each member of the procurement workforce. This section also discusses the achievement of an agency's cost, schedule, and performance goals and recommends that agencies relate this achievement to performance incentives for the procurement workforce.

<sup>11</sup> Section 4307 of the Clinger-Cohen Act (Public Law 104-106) requires agencies to collect and maintain standardized acquisition (that is, procurement) workforce information.

cost, schedule, and performance; and purchase card usage. This information includes the number and percentage of procurement employees who have met the education and training requirements.

**Department of Defense Inspector General Report.**<sup>12</sup> A recent Department of Defense Inspector General (DODIG) report concluded that "... there is cause for serious concern in the likelihood of the DOD acquisition workforce losing experienced personnel through attrition by FY 2005 and in the overall disconnects between workload forecasts, performance measures, productivity indicators, and plans for workforce sizing and training." The DODIG identified the following impacts of the reduced acquisition workforce:

- increased backlog in closing out completed contracts,
- increased program costs resulting from contracting for technical support versus using in-house technical support,
- insufficient personnel to fill in for employees on deployment,
- insufficient staff to manage requirements,
- reduced scrutiny and timeliness in reviewing acquisition actions,
- personnel retention difficulty,
- increase in procurement action lead time,
- some skill imbalances, and
- lost opportunities to develop cost savings initiatives.

**Office of Personnel Management (OPM) Special Study.** In December 1999, the OPM issued a Report of a Special Study entitled "The Three Rs: Lessons Learned from Recruitment, Relocation, and Retention Incentives." This study addresses a variety of incentives that Federal agencies and other organizations are using or can use to recruit and retain key personnel. These incentives include various recruiting and retention bonuses and allowances. The study also cites tuition forgiveness as a tool used successfully in the non-Federal public and private sector but not widely available in the Federal sector.

### ***Availability of Adequately Trained Procurement Personnel***

**Change in the Number of Potential Retirees.** In 1997, the NASA Office of Procurement estimated that 23 percent of its Agencywide procurement workforce would be retiring within 10 years under a better case scenario<sup>13</sup> and that 40 percent would be retiring within 10 years under a worst case scenario.<sup>14</sup> During this audit, we found these NASA-wide figures had increased to 27 percent and 42 percent, respectively, as of October 2000. This resulted in an overall Agencywide increase of 17 percent and 5 percent, respectively. At Goddard Space Flight Center (Goddard) and Johnson Space Center (Johnson), the two NASA Centers with the highest annual procurement

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<sup>12</sup> *DoD Acquisition Workforce Reduction Trends and Impacts*, Report No. D-2000-088, February 29, 2000.

<sup>13</sup> A better case scenario is one in which the employee works 5 years beyond the date at which he/she becomes eligible to retire.

<sup>14</sup> A worst case scenario is one in which the employee retires immediately upon becoming eligible.

expenditures, management estimated significant increases in projected 10-year attrition through retirement, as follows:

<b><u>Projected Procurement Workforce Attrition through Retirement</u></b>						
<b><u>Location</u></b>	<b><u>Better Case</u></b>			<b><u>Worst Case</u></b>		
	<b><u>Percentage of Potential Retirees</u></b>		<b><u>Increase in Potential Retirees</u></b>	<b><u>Percentage of Potential Retirees</u></b>		<b><u>Increase in Potential Retirees</u></b>
	<b><u>1997</u></b>	<b><u>2000</u></b>		<b><u>1997</u></b>	<b><u>2000</u></b>	
Goddard	12	16	33 percent	25	29	16 percent
Johnson	22	26	18 percent	35	42	20 percent

Recent NASA Procurement Management Survey Reports at Goddard<sup>15</sup> and Johnson<sup>16</sup> cited the following concerns regarding the loss of experienced staff:

- During interviews with the Office of Procurement survey team, procurement customers at Goddard expressed the opinion that backlogs and delays in the acquisition process are a continuing result of a previous reduction in the procurement workforce.
- The Johnson survey report states that procurement staffing at Johnson decreased by about 30 percent from FY 1996 to FY 2000. (During our audit, 25 percent (27 of 109) of the procurement workforce was eligible or would become eligible to retire within the next 5 years.) In interviews with the Office of Procurement survey team, procurement personnel, customers, and the Johnson legal staff, expressed concerns about the organization's ability to sustain its level of performance if the staffing level remains as it is or decreases.

Other NASA Centers may also be affected by the loss of experienced staff. For example, an October 2000 Procurement Management Survey Report at Langley Research Center (Langley) discussed turnover in the procurement workforce from 1998 through 2001. Fifteen (21 percent) of the 72 contract specialists on board in October 2000 had been at Langley 2 years or less. Further, 5 of the 15 specialists were entry-level employees.

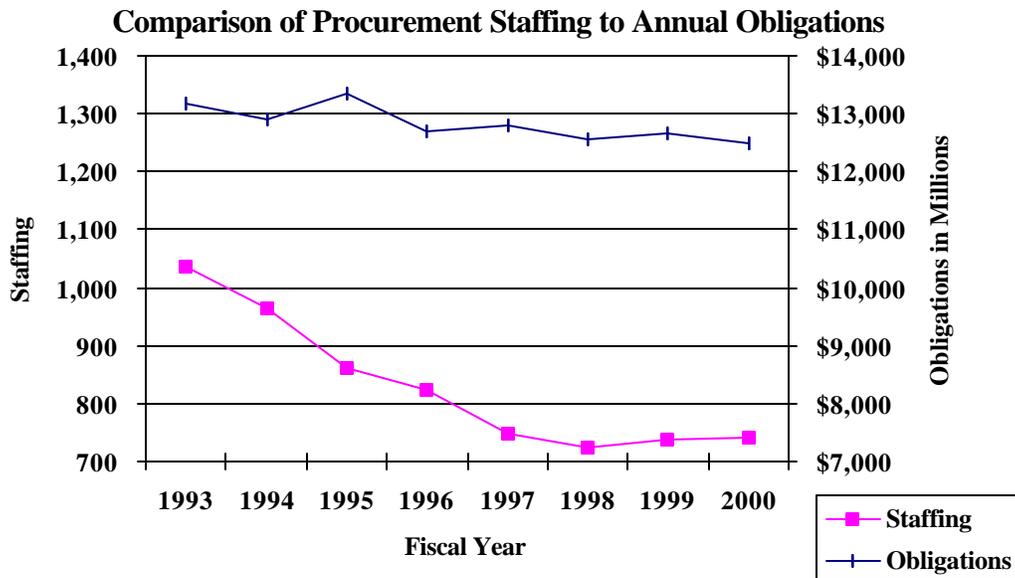
In 1997, Marshall Space Flight Center (Marshall) showed potential retirement of 20 percent and 38 percent for its better and worst case scenarios, respectively. These percentages increased to 26 percent and 40 percent, respectively, at the time of our audit in October 2000.

<sup>15</sup> The NASA Office of Procurement conducted the Procurement Management Survey at Goddard in January 2001. We extracted this information from the draft survey report; the final report has not yet been issued.

<sup>16</sup> The Johnson Space Center Procurement Management Survey Report was issued March 10, 2000.

## NASA Efforts to Address Workforce Needs

NASA procurement obligations have remained relatively level from FY 1993 through FY 2000. The number of procurement personnel, however, declined from 1,036 in FY 1993 to 740 in FY 2000 as shown in the following chart. NASA lost an additional 11 procurement personnel from November 2000 through February 2001--a 30-percent reduction since 1993.



**Comparison of Procurement Staffing\* to Annual Obligations  
FY 1993--FY 2000**

\*Procurement staffing includes the GS-1102 Contract Specialist, GS-1105 Purchasing Specialist, and GS-1106 Procurement Clerks and Technicians. These positions manage, supervise, perform, or develop policies and procedures for professional work involving the procurement of supplies, services, construction, and research and development.

During the last 3 years, NASA has initiated several actions to address a potential shortage in its workforce.

**Functional Leadership Plan.** A May 2000 NASA Office of Procurement Functional Leadership Plan<sup>17</sup> describes the Office's overall purpose and direction including goals, objectives, and performance measures to be used to evaluate success. The plan identifies a requirement for contract specialists to complete specific education requirements, developmental assignments, and mandatory training before being promoted. The plan also addresses major reform initiatives (discussed earlier in this report in the section entitled, Acquisition Reform Initiatives) and measures of success. Because the plan is less than 1 year old, however, NASA has not yet been able to quantify the success of any actions on the procurement workforce.

<sup>17</sup> The NASA Strategic Management Handbook requires a Functional Leadership Plan.

**NASA Contracting Intern Program (NCIP).** The NCIP goal is to provide NASA a valuable resource of candidates for employment. The program consists of a co-op phase<sup>18</sup> and an intern phase.<sup>19</sup> NASA selected 10 students in 1999 to participate during the first year of the NCIP. Of the 10 students, only 2 are still employed at NASA. In 2000, the program's second year, NASA selected 19 students, and as of the time of our audit, 17 were still participating in the program. The effectiveness of the program can be better measured after the second-year students have completed the intern phase.

**Education, Training, and Development.** The NASA Office of Procurement has increased its emphasis on the education, training, and development of procurement personnel. This emphasis imposes educational requirements to become a contract specialist and annual continuing education requirements to remain in that career field. As a result of this increased emphasis, the percentage of contract specialists who are certified at the level required for the work performed<sup>20</sup> has increased in the last year. Specifically, the number of personnel in the GS-12 contract specialist series<sup>21,22</sup> certified at Level II<sup>23</sup> has increased from 90 of 208 (43 percent) in June 1999 to 153 of 218 (70 percent) in September 2000. Similarly, the number of GS-13 through GS-15 contract specialists certified at Level III<sup>24</sup> has increased from 152 of 348 (44 percent) to 266 of 333 (80 percent) during the same period. However, NASA still has contract specialists who are not certified at the level commensurate with their grade level and has new contract specialists entering the workforce who require certification.

The NASA Office of Procurement has made appropriate investments in the education, training, and development of procurement personnel. The objective of the training program is to provide procurement professionals a standardized, consistent, and high-quality training program to prepare them to meet career changes and challenges. Career development is accomplished through a

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<sup>18</sup> The co-op phase involves hiring college students in their sophomore or junior year and assigning them to work at a specific NASA Center. The student alternates time spent attending school and working at the Center and completes at least 640 hours at the Center before graduation. Assuming successful job performance, upon graduation, the student may be hired as a permanent NASA employee and assigned to another NASA Center.

<sup>19</sup> The intern phase covers the remainder of the 30-month NCIP during which the new employee completes three or four required contracting courses while working in the procurement function.

<sup>20</sup> NASA requires that GS-1102 contract specialists complete specific contracting courses to receive certifications that correspond to the grade level at which they are working. The certification levels are I, II, and III.

<sup>21</sup> The general schedule is the broadest subdivision of the classification system covered by Title 5, U.S. Code. The general schedule includes a range of levels of difficulty and responsibility for positions for grades GS-1 to GS-15. "GS" designates the general schedule for supervisory and nonsupervisory positions at all of those grade levels.

<sup>22</sup> A series is a subdivision of an occupational group consisting of positions similar as to a specialized line of work and qualification requirements. A title and number such as the Contracting Series, GS-1102, or Purchasing Series, GS-1105, designate series.

<sup>23</sup> The Level II Contract Specialist's development continues, including on-the-job rotational assignments, but the length of time an employee spends in each position generally increases.

<sup>24</sup> The Level III Contract Specialist possesses in-depth knowledge in his or her functional areas and of the entire procurement process.

combination of work assignments, job rotation, procurement-specific training courses, education, and self-development programs.

### ***Conclusion***

NASA has made efforts to plan for future procurement workforce needs. However, the Agency must continue to pursue initiatives to obtain sufficient experienced procurement personnel given the acquisition reform changes that affect the number and type of contracts. Other initiatives could include, for example, the consideration of recruitment and retention bonuses and allowances, relocation bonuses and incentives, and tuition forgiveness.

## **Recommendations, Management's Response, and Evaluation of Response**

### **The Associate Administrator for Procurement should:**

- 1. Continue to pursue education, training, and development of staff to meet required certification levels for existing staff.**

**Management's Response.** Concur. The Associate Administrator stated that NASA currently has 85 percent of its targeted workforce certified at the correct certification levels and will work aggressively to encourage the remaining 15 percent to pursue the necessary steps to become certified. See Appendix C for the complete text of management's comments.

**Evaluation of Response.** Management's completed actions are responsive to the recommendation. Management's actions are sufficient to close the recommendation for reporting purposes.

- 2. Evaluate the ongoing results of the NCIP to determine whether changes may be necessary to increase the retention rate of interns.**

**Management's Response.** Concur. The Associate Administrator stated that to improve the retention rate, NASA is planning this year (fall 2001) to recruit and hire only college graduates as interns. They will be full-time, permanent NASA employees.

**Evaluation of Response.** Management's completed actions are responsive to the recommendation. Management's actions are sufficient to close the recommendation for reporting purposes.

- 3. Continue to work with OFPP to develop procurement performance measures that may be used to evaluate staffing requirements.**

**Management's Response.** Concur. The Associate Administrator stated that NASA has worked closely with OFPP in developing performance measures and continues to provide data to OFPP on education and training of the acquisition workforce.

**Evaluation of Response.** Management's completed actions are responsive to the recommendation. Management's actions are sufficient to close the recommendation for reporting purposes.

## **Appendix A. Objectives, Scope, and Methodology**

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### **Objectives**

The overall objective was to determine whether the NASA Office of Procurement was adequately planning for its procurement workforce needs. The specific objectives were to determine whether:

- Adequately trained procurement staff will exist at Centers based on procurement forecasts;
- the contracting intern program has been effective in recruiting and retaining new staff; and,
- appropriate investments in education, training, and development exist for procurement staff.

### **Scope and Methodology**

We reviewed applicable regulations and policies and documentation from NASA and other Government agencies.

During the audit, we:

- Researched Office of Management and Budget guidance, the Federal Acquisition Regulation (FAR), and the NASA FAR Supplement for criteria related to the qualifications and workload of procurement personnel.
- Obtained current procurement staffing information from each NASA Center to establish the number of procurement personnel and the certification level and training of those personnel.
- Obtained historical procurement data and procurement projections from each NASA Center to compare to the procurement staffing information that the Office of Procurement provided.
- Reviewed and discussed the workforce planning process with procurement managers at NASA Headquarters, Goddard, Johnson, and Marshall.
- Evaluated the effectiveness of the NASA Contracting Intern Program.

## **Appendix A**

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### **Audit Field Work**

We conducted audit field work from September 2000 through February 2001 at NASA Headquarters, Goddard Space Flight Center, Johnson Space Center, and Marshall Space Flight Center. We also gathered procurement workforce data from each of the other NASA Centers. We performed the audit in accordance with generally accepted government auditing standards.

## Appendix B. Acquisition Reform Initiatives

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**Simplified Acquisition Threshold.** The Federal Acquisition Regulation (FAR) Part 13.003 states that "[a]gencies shall use simplified acquisition procedures to the maximum extent practicable for all purchases of supplies or services not exceeding the simplified acquisition threshold." Simplified acquisitions are the acquisitions of supplies and services, including construction, research and development, and commercial items that do not exceed the simplified acquisition threshold of \$100,000. The threshold is \$100,000, except that the threshold is \$200,000 in the case of any contract to be awarded and performed, or purchase to be made, outside the United States in support of a contingency operation (as defined in 10 U.S.C. 101(a)(13)) or a humanitarian or peacekeeping operation (as defined in 10 U.S.C. 2302(8) and 41 U.S.C. 259(d)). The FAR prescribes simplified acquisition procedures intended to:

- reduce administrative costs;
- improve opportunities for small, small disadvantaged, and women-owned small business concerns to obtain a fair proportion of Government contracts;
- promote efficiency and economy in contracting; and
- avoid unnecessary burdens for agencies and contractors.

**Multiple Award Contracts.** The Federal Acquisition Streamlining Act (FASA) of 1994 authorized agency heads to enter into multiple award delivery and task order contracts for the procurement of goods and services. Multiple award contracts occur when two or more contracts are awarded from one solicitation. FASA recommends that agencies use multiple awards and requires that the implementing FAR "establish a preference for awarding, to maximum extent practicable, multiple task or delivery order contracts for the same or similar services or property." Multiple award contracts are excellent tools for avoiding duplicative solicitations and for accelerating the contracting process.

**Purchase Cards.** FAR Part 13.003 states that "... agencies shall use the Governmentwide commercial purchase card and electronic purchasing techniques to the maximum extent practicable in conducting simplified acquisitions." Part 13.201 states that the Governmentwide commercial purchase card shall be the preferred method to purchase and pay for micropurchases (that is, purchases less than \$2,500). Part 13.301 states that the Governmentwide commercial purchase card is authorized for use in making and/or paying for the purchase of supplies, services, or construction. The card may be used only for purchases that are otherwise authorized by law or regulation. NASA reported to the OFPP that in FY 2000, NASA employees used purchase cards to complete 94 percent of the Agency's micropurchases with a resultant cost savings of \$12.6 million.

**Consolidated Contracting Initiative.** The Agency's Consolidated Contracting Initiative (CCI) goal is to develop a core of world-class contracts that will enable NASA to acquire common goods and services quickly, at fair and reasonable prices, and at a low administrative cost. Many of the contracts that are accessible through the CCI allow electronic ordering through the Internet. The General Services Administration has cited

## **Appendix B**

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NASA's CCI as an example of making greater use of existing contracts to meet common needs. The Office of Management and Budget 1999 report to the Congress on "Electronic Purchasing and Payment in the Federal Government" states that the CCI has substantially increased NASA's use of existing contracts--lessening time spent on acquisition-related tasks, minimizing contract duplication, reducing closeout backlogs, and improving contract cooperation with other Federal agencies.

## Appendix C. Management's Response

National Aeronautics and  
Space Administration  
**Headquarters**  
Washington, DC 20546-0001



SEP. 18 2001

Reply to Attn of: HK

TO: W/Assistant Inspector General for Auditing  
FROM: HK/Director, Contract Management Division  
SUBJECT: Code H Response to OIG Report on Procurement  
Workforce Planning/A-00-058-00

Enclosed is our response to the subject report dated  
August 22, 2001.

Please call Barbara Cephas at 202-358-0465 or Jack Horvath  
at 202-358-0456 if you have any questions or need further  
coordination on this matter.

A handwritten signature in black ink, appearing to read "Scott Thompson".

Scott Thompson

Enclosure

HEADQUARTERS OFFICE OF PROCUREMENT

RESPONSE TO

OFFICE OF INSPECTOR GENERAL (OIG)

DRAFT REPORT ASSIGNMENT NUMBER

A-00-058-00

DATED AUGUST 22, 2001

PROCUREMENT WORKFORCE PLANNING

DATE: SEP. 18 2001

ENCLOSURE

The narrative response is provided as follows:

GENERAL COMMENTS:

As stated in the draft report, the issues of an adequate procurement workforce were known and being addressed prior to this review. With fieldwork done September 2000 through February 2001, the draft report does not address resultant actions taken by NASA, and specifically by the Johnson Space Center (JSC). A JSC internal review of age profiles as of August 21, 2001, and retirement and separation trends from FY 93-01, shows the statistics listed in the draft report to be significantly overstated with the latest hiring. JSC was given hiring authority for 16 FTE's in FY-01. Staffing concerns continue to be addressed through recruitment and by focusing on individuals through education, training, and development.

In response to the subject audit concerning the Marshall Space Flight Center (MSFC), as of August 2001, the potential retirement is 8.5 percent and 29 percent for its better and worst case scenarios in lieu of the 26 percent and 40 percent numbers identified in the draft audit report.

OIG RECOMMENDATION 1:

Continue to pursue education training and development of staff to meet required certification levels for existing staff.

CODE H RESPONSE TO RECOMMENDATION NO 1: CONCUR

As of July 30, 2001, NASA currently has 85% of their targeted workforce certified at the correct certification levels. We will work aggressively to encourage the remaining 15% to pursue the necessary steps to become certified. NASA will continue to aggressively pursue training and development opportunities for our acquisition workforce. This will assure that NASA personnel are able to perform professionally in the ever-evolving environment of government acquisition

Based on the above, Code H considers the recommendation closed.

## Appendix C

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### OIG RECOMMENDATION 2:

Evaluate the ongoing results of the NCIP to determine whether changes may be necessary to increase the retention of interns.

### CODE H RESPONSE TO RECOMMENDATION NO 2: CONCUR

Technically, the problem has not been retaining interns, but rather retaining the co-op students until they graduate and become interns. Currently, we have 24 NCIP participants out of the 40 that have been hired in the 3 years of the program, a retention rate of 60%. Three co-ops have converted to interns, and, by next June, 11 more are scheduled to do so. To improve the retention rate, we are planning this year- fall, 2001- to recruit & hire only college graduates as interns. They will be fulltime, permanent NASA employees, although they will be considered HQ employees for the 30 months of the NCIP experience. We will not hire any more co-op students. The length and rotational requirements of the NCIP will not change.

Based on the above, Code H considers the recommendation closed.

### OIG RECOMMENDATION 3:

Continue to work with OFPP to develop procurement performance measures that may be used to evaluate staffing requirements.

### CODE H RESPONSE TO RECOMMENDATION NO 3: CONCUR

NASA has worked very closely with the OFPP in developing performance measures to be used to evaluate staffing requirements. NASA was the first agency to submit to OFPP and receive approval of our "NASA Career Acquisition Training Handbook." We are currently in the process of revising the handbook to keep current with recent changes. NASA has developed and initiated an on-going training and certification program that is mandatory for our entire acquisition workforce. We will continue to work with and provide data to OFPP on education and training of its acquisition workforce.

## **Appendix D. Report Distribution**

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### **National Aeronautics and Space Administration (NASA) Headquarters**

A/Administrator  
AI/Associate Deputy Administrator  
AA/Chief of Staff  
AB/Associate Deputy Administrator for Institutions  
B/Acting Chief Financial Officer  
B/Comptroller  
BF/Director, Financial Management Division  
G/General Counsel  
H/Associate Administrator for Procurement  
HK/Director, Contract Management Division  
HS/Director, Program Operations Division  
J/Associate Administrator for Management Systems  
JM/Director, Management Assessment Division  
L/Acting Associate Administrator for Legislative Affairs  
M/Associate Administrator for Space Flight  
R/Associate Administrator for Aerospace Technology  
S/Associate Administrator for Space Science  
Y/Associate Administrator for Earth Science

### **NASA Centers**

Director, Ames Research Center  
Director, Dryden Flight Research Center  
Director, Glenn Research Center at Lewis Field  
Director, Goddard Space Flight Center  
Acting Director, Lyndon B. Johnson Space Center  
Director, Kennedy Space Flight Center  
Director, Langley Research Center  
Director, George C. Marshall Space Flight Center  
Acting Director, Stennis Space Center  
Chief Counsel, John F. Kennedy Space Center

### **Non-NASA Federal Organizations and Individuals**

Assistant to the President for Science and Technology Policy  
Deputy Associate Director, Energy and Science Division, Office of Management and Budget  
Branch Chief, Science and Space Programs Branch, Energy and Science Division, Office of Management and Budget

## **Appendix D**

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Managing Director, Acquisition and Sourcing Management Team, General Accounting Office

Senior Professional Staff Member, Senate Subcommittee on Science, Technology, and Space

### **Chairman and Ranking Minority Member – Congressional Committees and Subcommittees**

Senate Committee on Appropriations

Senate Subcommittee on VA, HUD, and Independent Agencies

Senate Committee on Commerce, Science, and Transportation

Senate Subcommittee on Science, Technology, and Space

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on VA, HUD, and Independent Agencies

House Committee on Government Reform and Oversight

House Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations

House Subcommittee on National Security, Veterans Affairs, and International Relations

House Subcommittee on Technology and Procurement Policy

House Committee on Science

House Subcommittee on Space and Aeronautics, Committee on Science

### **Congressional Member**

Honorable Pete Sessions, U.S. House of Representatives

## NASA Assistant Inspector General for Audits Reader Survey

The NASA Office of Inspector General has a continuing interest in improving the usefulness of our reports. We wish to make our reports responsive to our customers' interests, consistent with our statutory responsibility. Could you help us by completing our reader survey? For your convenience, the questionnaire can be completed electronically through our homepage at <http://www.hq.nasa.gov/office/oig/hq/audits.html> or can be mailed to the Assistant Inspector General for Audits; NASA Headquarters, Code W, Washington, DC 20546-0001.

**Report Title:** Procurement Workforce Planning

**Report Number:** \_\_\_\_\_ **Report Date:** \_\_\_\_\_

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*Circle the appropriate rating for the following statements.*

	Strongly Agree	Agree	Neutra l	Disagre e	Strongl y Disagre e	N/A
1. The report was clear, readable, and logically organized.	5	4	3	2	1	N/A
2. The report was concise and to the point.	5	4	3	2	1	N/A
3. We effectively communicated the audit objectives, scope, and methodology.	5	4	3	2	1	N/A
4. The report contained sufficient information to support the finding(s) in a balanced and objective manner.	5	4	3	2	1	N/A

***Overall, how would you rate the report?***

Excellent	Fair
Very Good	Poor
Good	

***If you have any additional comments or wish to elaborate on any of the above responses, please write them here. Use additional paper if necessary.*** \_\_\_\_\_

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***How did you use the report?*** \_\_\_\_\_

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**How could we improve our report?** \_\_\_\_\_

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**How would you identify yourself? (Select one)**

- |                     |  |
|---------------------|--|
| Congressional Staff | Media                                    |
| NASA Employee       | Public Interest                          |
| Private Citizen     | Other: _____                             |
| Government: _____   | Federal: _____ State: _____ Local: _____ |

**May we contact you about your comments?**

**Yes:** \_\_\_\_\_ **No:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_

Thank you for your cooperation in completing this survey.

## **Major Contributors to the Report**

Lorne A. Dear, Program Director, Procurement Audits

Tony A. Lawson, Program Manager

Walter K. Curtis, Auditor-in-Charge

Mary Anderson, Auditor

Amy Larkin, Auditor

Stephen Siu, Auditor

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